

INTERNATIONAL SEARCH REPC

International Application No

PCT/US2004/024747

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H01L21/20 C30B25/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 H01L C30B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 03/105189 A (AMBERWAVE SYSTEMS CORPORATION) 18 December 2003 (2003-12-18) page 17, lines 5-9 page 22, lines 21-23	1,7-10
P,X	WO 2004/001857 A (MASSACHUSETTS INSTITUTE OF TECHNOLOGY) 31 December 2003 (2003-12-31) claims; figure 1	27
A	CH. BUCHAL ET AL.: "Ultrafast Si-based MSM mesa photodetectors with optical waveguide connection" MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol. 3, 2000, pages 399-403, XP001205581 abstract; figure 1	1-28

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

14 March 2005

Date of mailing of the international search report

22/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040. Tx. 31 651 epo nl.

Authorized officer

Wolff C

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/024747

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	BOYANOV B I ET AL: "Growth of epitaxial CoSi ₂ on SiGe(001)" JOURNAL OF APPLIED PHYSICS, AMERICAN INSTITUTE OF PHYSICS. NEW YORK, US, vol. 86, no. 3, 1 August 1999 (1999-08-01), pages 1355-1362, XP012048329 ISSN: 0021-8979 abstract -----	1-28
A	YODO T ET AL: "Influences of off-angle and off-direction of substrate on crystalline quality of GaAs and Ge heteroepitaxial films grown on vicinal Si(110) substrates by molecular-beam epitaxy" JOURNAL OF CRYSTAL GROWTH, NORTH-HOLLAND PUBLISHING CO. AMSTERDAM, NL, vol. 209, no. 4, February 2000 (2000-02), pages 724-733, XP004198396 ISSN: 0022-0248 abstract -----	1-28
A	STEEGEN A ET AL: "Silicide-induced stress in Si: origin and consequences for MOS technologies" MATERIALS SCIENCE AND ENGINEERING R: REPORTS, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. 38, no. 1, 4 June 2002 (2002-06-04), pages 1-53, XP004354317 ISSN: 0927-796X abstract -----	1-28

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/024747

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 03105189	A	18-12-2003	US	2003227057 A1	11-12-2003
			WO	03105189 A2	18-12-2003
			US	2004005740 A1	08-01-2004
			US	2004031979 A1	19-02-2004
WO 2004001857	A	31-12-2003	WO	2004001857 A1	31-12-2003
			US	2003235931 A1	25-12-2003
			US	2005040411 A1	24-02-2005